Water Regulation and Conservation: How Planning and Practices May Impact How You Farm

Tuesday morning 11:15 am

Where: Grand Gallery (main level) Room C

Farmers know better than anyone how important it is to keep soil, pesticides, and nutrients on their fields and out of waterways – it saves money, improves production, and protects water quality. As water regulation increases in Michigan and nationwide, farmers need to be aware of both the requirements they must follow and the opportunities to voluntarily improve stewardship. This discussion will walk through how local, state, and federal programs interact – everything from local watershed management plans, state wetland regulation, federal Farm Bill programs and the new Waters of the U.S. rule. Farmers will learn about opportunities to become involved in water planning and protection, to improve their farms, protect water quality, and prevent enforcement of more burdensome regulation.

MI Recertification credits: 1 (COMM CORE, PRIV CORE)

CCA Credits: SW(0.5)

Moderator: Ben Kudwa, Michigan Vegetable Council, Grand Ledge, MI

11:15 am How Planning and Practices May Impact How You Farm

 Laura Campbell, Ag Ecology Department, Michigan Farm Bureau, Lansing, MI

12:00 noon Session Ends

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Farming has always been a challenge: weather, land and crop prices, weeds and pests, timing, labor, insurance, and equipment. Increasingly, farmers face regulatory challenges too, from nutrient runoff to spray drift management and everything in between. No one is more aware of the need for protecting water quality than farmers in Michigan, who are surrounded by the Great Lakes: 20 percent of the world's fresh surface water. However, they have to run a successful business too. Knowing how water regulations and conservation programs interact can help farmers do both. Here is a summary of (some) regulatory and voluntary water quality programs and how they may affect farms:

Program: Clean Water Act

Primary Agency: <u>Environmental Protection Agency</u> (EPA) (in Michigan, the <u>Department of Environmental Quality</u> (DEQ) is the state-level agency involved with most regulatory programs)

How it affects your farm:

- Waters of the United States define what waters can be regulated.
- <u>Water quality standards</u> can be set for pollutants including chemicals, nutrients, and pathogens.
- In impaired waters, EPA can establish <u>Total Maximum Daily Loads</u> (TMDLs) to limit the amount of pollution entering a waterway, which can limit the practices you can use on your farm, like applying certain chemicals and nutrients
- National Pollutant Discharge Elimination System (NPDES) permits are issued for industrial facilities, wastewater treatment plants, and permitted livestock farms. If your farm is on a municipal water system, you may be limited for how much of a pollutant you can discharge down drains because of the treatment plant's discharge limits.
- <u>Section 319</u> is a *voluntary* grant program funded by EPA, which helps tribes, local and state agencies, and other organizations put conservation measures on the ground on farms and in riparian (riverside) areas. Participation requires a local watershed management plan (see below).

Program: Great Lakes Water Quality Agreement

Primary Agencies: International Joint Commission (IJC), EPA, and Environment Canada

- Recommendations: The IJC makes recommendations for EPA and Environment Canada based on the Agreement, to protect water quality. It is not regulatory, though EPA and Environment Canada may enforce regulations to follow the recommendations.
- State Commitments: Michigan, Ohio, and Ontario have <u>pledged</u> to reduce phosphorus loading into Lake Erie by 40% from 2008 levels, in response to <u>IJC recommendations</u>. Michigan's draft <u>plan</u> calls for several state-level changes, including encouraging more farms to implement conservation practices.

Program: Great Lakes Restoration Initiative (GLRI)

Primary Agencies: EPA, U.S. Department of Agriculture, U.S. Department of Interior, and others

How it affects your farm:

• Funding: GLRI grants provide funding for projects at the state and local level to control invasive species, clean up legacy pollution, and implement conservation practices on the ground, including on farms and in riparian areas. Conservation districts, DEQ offices, and conservation groups frequently use this funding for projects on and near farms.

Program: Endangered Species Act

Primary Agency: U.S. Fish and Wildlife Service

How it affects your farm:

- Endangered species listings can involve both critical habitat designation, which restricts uses on the land and in or near water, and chemical use restrictions, such as pesticides or other substances that may harm the species or its habitat.
- States develop habitat and species protection plans with the Fish and Wildlife Service
- Note: the <u>Michigan Department of Natural Resources</u> (DNR) and the <u>U.S. Fish and Wildlife</u>
 <u>Service</u> maintain separate lists of endangered and threatened species, and each agency enforces
 restrictions for the species on their lists.

Program: Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Primary Agency: EPA

How it affects your farm:

- FIFRA determines how EPA will regulate the potential harm to both humans and the environment from pesticides.
- <u>Label restrictions</u> on pesticides include both safe handling requirements and setbacks and other environmental protections that must be taken when applying the pesticide. Water protection is one of the most important label restrictions, and application of a pesticide to any regulated water (see Waters of the United States above) requires permitting.

Program: The Agriculture Act of 2014 (Farm Bill)

Primary Agency: USDA Natural Resources Conservation Service

- Among administering other programs, the Farm Bill directs funding to the NRCS for assistance on farm conservation practices, and providing cost share to farmers for practice implementation.
- Farm Bill programs include <u>management practices</u>, <u>easements</u>, <u>habitat and riparian protection</u>.
- Conservation Districts (see below) and state and local staff coordinate many voluntary conservation programs with NRCS practices to provide farmers cost share opportunities.

Program: Natural Resources and Environmental Protection Act (NREPA)

Primary Agency: Michigan DEQ

How it affects your farm:

- NREPA is the primary environmental quality act for all activity in Michigan. NREPA sets rules for statewide water quality standards based on the Clean Water Act (see above).
- NREPA may require <u>permits</u> for activities that impact water quality, such as draining wetlands, constructing or changing ditches near regulated Waters of the United States (see above), or farming in previously unfarmed wetlands.
- Michigan is able to regulate some portions of the Clean Water Act because it has delegated authority under the Act to do so. Michigan uses joint permits to streamline the process for permittees.
- Note: In 2013, Michigan enacted <u>changes</u> to NREPA to comply with EPA's requirement that the
 state more closely follow the Clean Water Act. That new law is still being reviewed by EPA, but
 if EPA determines the new law is not Clean Water Act compliant, the agency could remove
 Michigan's delegated authority.

Program: Michigan Agriculture Environmental Assurance Program (MAEAP)

Primary Agencies: <u>Michigan Department of Agriculture and Rural Development</u> (MDARD), <u>Michigan Association of Conservation Districts</u> (MACD)

How it affects your farm:

- MAEAP helps farmers with whole-farm <u>risk assessments</u>, to reduce the potential for pollution. MAEAP technicians help farmers implement action plans to improve their environmental stewardship.
- MAEAP practices are verified by MDARD staff to ensure practices are completed.
- Practices coordinate with Farm Bill programs (see above) and state and federal environmental
 regulations to help farmers with costs of implementation and with ensuring compliance with
 environmental requirements.

Program: Generally Accepted Agriculture and Management Practices (GAAMPS)

Primary Agency: MDARD

- GAAMPS are the guidelines developed by extensive university research and reviewed annually by farming, ag industry, and environmental groups, that ensure protection under Michigan's Right to Farm Act.
- Practices recommended in the GAAMPS include storage and application of pesticides and nutrients, irrigation use, manure and odor management, farm markets, and others.
- <u>Michigan State University</u> research, <u>Extension</u>, and <u>Tri-State recommendations</u> form the basis for GAAMP practices, to ensure farmers receive advice on practices that will both protect natural resources and promote successful business practices.

GAAMP compliance and nuisance complaints are investigated by MDARD staff, who may turn
investigations over to DEQ if they find NREPA violations such as discharge of pollutants into
waterways.

Program: Conservation District Programs

Primary Agency: MACD, individual County Conservation Districts

- Conservation Districts offer numerous programs for farmers to participate in that protect water quality, such as <u>Best Management Practice Auctions</u>, <u>tree and native plant sales</u>, <u>detecting failing septic systems</u>, and many others.
- Conservation Districts coordinate Farm Bill programs, work with MAEAP technicians on helping farmers implement practices, and apply for grants through Section 319 and the GLRI, among others (see above).
- Conservation Districts often coordinate or are involved in developing <u>watershed management plans</u> that bring together watershed groups, farmers, businesses, residents, and environmental agencies to determine what actions people in a local watershed can take to protect water quality. These plans make additional funding for practices possible, and form the basis for significant local planning around the watershed.